

Patent claims

1. A bearing for axially mounting a rotor (8) of a gas turbine, having a rotationally fixed bearing body (2) which has a hydraulic piston arrangement (3, 4) for axially displacing the rotor (8) from a first operating position into a second operating position, and having a hydraulic system (9) fluidically connected to the hydraulic piston arrangement (3, 4), characterized in that, to limit the displacement speed of the rotor, at least one restrictor for the hydraulic medium is provided between hydraulic piston arrangement (3, 4) and hydraulic system (9).
2. The bearing (1) as claimed in claim 1, characterized in that the restrictor (26, 27) is arranged in the bearing body (2).
3. The bearing (1) as claimed in claim 2, characterized in that the restrictor (26, 27) is formed by flow constrictions arranged in the bearing body (2) without a line being interposed.
4. The bearing (1) as claimed in claim 1, 2 or 3, characterized in that the restrictor is formed by a flow-control valve (20, 21).
5. The bearing (1) as claimed in one of claims 1 to 4, characterized in that the hydraulic piston arrangement (3, 4) has a plurality of pistons (23) arranged in corresponding respective piston chambers (22).
6. The bearing (1) as claimed in one of claims 1 to 5, characterized in that the piston chambers (22) are bores of cylindrical design.

7. The bearing (1) as claimed in one of the preceding claims, characterized in that the piston chambers (22) are fluidically connected to one another.

5 8. The bearing (1) as claimed in one of the preceding claims, characterized in that the hydraulic piston arrangement (3, 4) is of annular design.

10 9. The bearing (1) as claimed in one of the preceding claims, characterized in that two hydraulic piston arrangements (3, 4) formed separately from one another are provided and are arranged opposite one another on the bearing body (2).

15 10. The bearing (1) as claimed in one of the preceding claims, characterized in that the two hydraulic piston arrangements (3, 4) are fluidically connected to one another.

20 11. A device as claimed in one of the preceding claims, characterized in that the two hydraulic piston arrangements are fluidically connected to one another with a 4/2-way directional control valve (19) interposed.

12. A gas turbine having a bearing (1) as claimed in one of the preceding claims.